

H₂S Scavenger Aid KMA009B

1. Introduction

One of the major problems that is generally encountered when acidizing sour oil or gas well is the production of H₂S. Sulfide scales or minerals presented in the formation or production tubular will react with acids to release H₂S, which is corrosive and hazardous. H₂S Scavenger and Scavenger Aid are generally required while acidizing sour gas or oil wells to inhibit corrosion and resolve safety concerns.

H₂S Scavenger Aid KMA009B is used in acid fluids in combination with H₂S Scavenger to control corrosion effect of H₂S that may be present due to acid reaction with sulfide scales or formation minerals. KMA009B will remove H₂S in acids by reaction to form non-corrosive or non-hazardous compounds.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA009B	Colorless to yellowish liquid	1.06-1.11	Miscible	Eyes	Fire	8.5-9.5 (1%)

3. Chemical Properties and Application

Sulfide minerals present in the formation or sulfide scales deposited at tubulars will react with acids while acidizing sour gas or oil wells. KMA009B is a mixture of organic amino compounds that can be easily dispersed into acids, brines, or solvents.

KMA009B is effective in most acid systems such as HCl and mud acids. It can be used at temperatures up to 350°F and for protection time up to 24 hours.

The loading of KMA009B depends on the formation of mineralogical property and scaling conditions of wellbore. The acidizing design must also include procedures to flush away produced gas from tubing or casing before acid comes in contact with formation or scales. KMA009B is compatible with most additives in acids.

4. Treatment

Typical concentrations range from 2 to 10 Gal/1,000 Gal (2 to 10 L/m³) of acid. Laboratory testing is required to determine the optimum concentration that will provide enough protection time at well conditions.

5. Packaging

KMA009B supplied 55 gallons high density polyethylene (HDPE) drums. Keep it away from extreme conditions such as places near flames or direct sunlight.